

**ABSTRACT**

A DNA construct that encodes, upon expression in a plant cell, a fusion protein comprising a multimeric cholera toxin B subunit and a first immunogenic antigen from a causal factor of a mammalian disease. A DNA construct that encodes, upon expression in a plant cell, a fusion protein comprising a cholera toxin A2 subunit, a multimeric cholera toxin B subunit, a first immunogenic antigen from a causal factor of a mammalian disease, and a first immunogenic antigen from a causal factor of a mammalian disease. A method of inducing partial or complete immunity to an infectious disease in a mammal comprising providing to the mammal for oral consumption an effective amount of the plant transformed with a construct according to the present invention